

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1-13. (Canceled).

14. (New) A data transmission system comprising a transmitting side apparatus that transmits data and a receiving side apparatus that receives data, wherein:

said receiving side apparatus measures the reception quality of received data and transmits, if an error is detected in the received data, to said transmitting side apparatus a retransmission request signal corresponding to the measured reception quality, wherein the correspondence is such that a plurality of retransmission request signals transmitted in response to detected errors are differentiated according to respective measures of reception quality; and

said transmitting side apparatus detects, upon receiving the retransmission request signal, a capacity necessary for demodulation at said receiving side apparatus, based on the reception quality corresponding to the received retransmission request signal, and determines a capacity for data retransmission

based on the detected demodulation capacity and traffic conditions.

15. (New) The data transmission system according to claim 14, wherein said transmitting side apparatus finds a transmissible maximum transmission capacity in traffic, at a time of data retransmission, and if the detected capacity necessary for demodulation is greater than this maximum transmission capacity, retransmits data at said maximum transmission capacity.

16. (New) The data transmission system according to claim 14, wherein said transmitting side apparatus assigns radio resources so that data is retransmitted at a transmissible maximum transmission capacity in traffic at a time of data retransmission.

17. (New) The data transmission system according to claim 14, wherein said transmitting side apparatus preassigns radio resources to be used for transmission before data transmission and uses these assigned radio resources until retransmission of one transmit unit of data ends.

18. (New) The data transmission system according to claim 14, wherein said transmitting side apparatus preassigns radio resources to be used for transmission before data transmission and uses these assigned radio resources for a selected number of data units or for the transmission and all retransmissions of a data unit.

19. (New) The data transmission system according to claim 14, wherein all retransmissions of particular data received in error are transmitted at a capacity based on the measured reception quality of the original transmission of this data.

20. (New) The data transmission system according to claim 14, wherein a predetermined number of retransmissions of particular data received in error are transmitted at a capacity based on the measured reception quality of the original transmission of this data.

21. (New) The data transmission system according to claim 14, wherein said transmitting side apparatus assigns radio resources according to traffic at the time of data retransmission and transmits, within said radio resources, data at a capacity

that compensates for an excess or deficiency of measured reception quality at the time of a previous data transmission.

22. (New) The data transmission system according to claim 14, wherein the total number of reception quality measures that may differentiate the plurality of retransmission request signals is a number one less than a power of two.

23. (New) A data transmission system comprising:

a transmitting side apparatus that transmits a first signal, multiplexed with data, providing information on assigned radio resources based on traffic conditions; and

a receiving side apparatus that measures the reception quality of said transmitted data and, if an error is detected in said data, determines a capacity within the radio resources indicated by said first signal and transmits a signal requesting retransmission and a signal indicating the determined capacity, wherein

said transmitting side apparatus receives the two signals transmitted by the receiving side apparatus and determines a capacity for data retransmission based on the received capacity signal and traffic conditions and retransmits the data at the capacity determined by the transmitting side apparatus.

24. (New) A data transmission system comprising a base station apparatus and a communication terminal apparatus, wherein:

said communication terminal apparatus measures the reception quality of received data and transmits, if an error is detected in the received data, to said base station apparatus a retransmission request signal corresponding to the measured reception quality, wherein the correspondence is such that a plurality of retransmission request signals transmitted in response to detected errors are differentiated according to respective measures of reception quality; and

said base station apparatus detects, upon receiving the retransmission request signal, a capacity necessary for demodulation at said communication terminal apparatus, based on the reception quality corresponding to the received retransmission request signal, and determines a capacity for data retransmission based on the detected demodulation capacity and traffic conditions.

25. (New) A data transmission method comprising:

at a receiving side apparatus:

measuring the reception quality of received data;

detecting whether the received data has an error; and

transmitting, if an error is detected in the received data, to a transmitting side apparatus a retransmission request signal corresponding to the measured reception quality, wherein the correspondence is such that a plurality of retransmission request signals transmitted in response to detected errors are differentiated according to respective measures of reception quality, and  
at the transmitting side apparatus:

receiving the retransmission request signal transmitted by the receiving side apparatus;

detecting a capacity necessary for demodulation at a receiving side apparatus, based on the reception quality corresponding to the received retransmission request signal;  
and

determining a capacity for data retransmission based on the detected demodulation capacity and traffic conditions.